Electronic Version
Stylesheet Version v1.1.1

METAL-INSULATOR-METAL CAPACITOR AND METHOD OF FABRICATION

Abstract

A method and structure for a MIM capacitor, the structure including: an electronic device, comprising: an interlevel dielectric layer formed on a semiconductor substrate; a copper bottom electrode formed in the interlevel dielectric layer, a top surface of the bottom electrode co-planer with a top surface of the interlevel dielectric layer; a conductive diffusion barrier in direct contact with the top surface of the bottom electrode; a MIM dielectric in direct contact with a top surface of the conductive diffusion barrier; and a top electrode in direct contact with a top surface of the MIM dielectric. The conductive diffusion barrier may be recessed into the copper bottom electrode or an additional recessed conductive diffusion barrier provided. Compatible resistor and alignment mark structures are also disclosed.